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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,553	07/16/2004	Shigeharu Taira	DK-US020066	4864
22919	7590	06/30/2005	EXAMINER	
SHINJYU GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			WEST, PAUL M	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.		Applicant(s)	
	10/501,553		TAIRA, SHIGEHARU	
	Examiner		Art Unit	
	Paul M. West		2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03312005</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pastorello in view of admitted prior art (page 2, lines 4-9).

As to claim 1, Pastorello teaches a method for determining the extent of contamination of residue from refrigerant-using equipment comprising: applying residual material from inside the refrigerant-using equipment to a check tool (Abstract, lines 7-8); and performing a determination with regard to the contamination of the residual material based upon a color of the check tool to which it was applied (Abstract, lines 11-15). Pastorello does not teach correlating the color, which indicates contamination of the residual material, to the reusability of the refrigerant-using equipment. Admitted prior art (page 2, lines 4-9) discloses that contaminated refrigerator oil will adhere to refrigerant-using equipment and that the extent of contamination of the oil is an indication of the reusability of the refrigerant-using equipment. It would have been obvious to one of ordinary skill in the art to combine the teachings of Pastorello with admitted prior art (page 2, lines 4-9) because determining whether certain equipment is reusable can be much more efficient and cost-effective.

As to claim 2, Pastorello teaches: the check tool including a first means on which the residual material is applied (Abstract, lines 9-13), and a second means that displays a determination reference color (Abstract, lines 14-15); the residual material being applied to the first means in the first step (Abstract, lines 7-8); and a color of the first means being compared to the reference color of the second means to perform the determination in the second step (Abstract, lines 14-15).

As to claim 3, Pastorello uses a plurality of reference colors on the second means.

As to claims 4 and 5, the combination of Pastorello and Applicant's admission (page 2, lines 4-9) teaches all the limitations as set forth above, and Pastorello further teaches a series of boundary colors indicating specific thresholds of contamination (See chart, bottom of Col. 4). Pastorello does not teach correlating these boundary colors with determinations that cleaning is necessary or that the refrigerant-using equipment is usable. However, it would have been obvious to one of ordinary skill in the art to correlate the boundary reference colors with determinations about the actions to be taken with regards to the refrigerant-using equipment because doing so would prevent dangerous or environmentally harmful incidents which could occur as the result of using damaged or unclean equipment.

As to claim 7, Pastorello's check tool acts as a pH analysis tool that changes color by means of an acid (Col. 2, lines 37-40); residual material is applied to the check tool in the first step; and the degree of degradation of the residual material is estimated from the color of the check tool in the second step (Abstract, lines 7-16).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pastorello in view of admitted prior art (page 2, lines 4-9) and further in view of McNeely.

As to claim 6, the combination of Pastorello and admitted prior art (page 2, lines 4-9) teaches a check tool as described above that can be used with the method of claim 2 wherein the first means and second means are disposed near each other but does not teach the first means and the second means being unitary. McNeely teaches a pH indicator device which indicates pH by changing color and incorporates the reference color on the device as a unitary piece (Col. 7, lines 19-21). It would have been obvious to one of ordinary skill in the art to employ the teachings of McNeely with the combination of Pastorello and admitted prior art (page 2, lines 4-9) in order to make a tool that is one unitary piece because fewer parts make manufacturing and using the device more efficient.

Conclusion

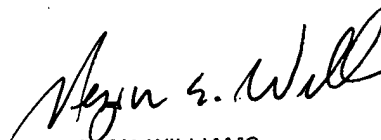
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note that Klodowski (4923806) and Clough et al. (5846833) both use color change devices to measure contaminants in refrigerant materials.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul M. West whose telephone number is (571) 272-8590. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Hezron Williams", with a long horizontal line extending from the end of the signature.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800